

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-39.
- After this Amendment: Claims 1-13, 15, 16, 18-21, 24, 25, 27-29, 31-33, 35-38 and 40-44.

Claims canceled herein: Claims 14, 17, 22, 23, 26, 30, 34 and 39.

Claims amended herein: Claims 1, 3, 15, 16, 18, 24, 25, 27, 29, 31, 33, 35, 36 and 38.

New claims added herein: Claims 40-44.

Claims:

1. (Currently Amended) A method, comprising:

providing a set of viewer selectable attributes, the set of attributes comprising attributes which are each descriptive of a different aspect of a television program, wherein each attribute of the set corresponds to a combinable navigation context to generate a navigable sequence of television programs;

selecting at least two attributes from the set;

logically combining the navigation contexts which correspond to the selected at least two attributes using Boolean operators;

querying a database of television programming metadata for television program identifiers associated with the combined navigation contexts; [[and]]

~~presenting~~ generating ~~[[a]]~~ at least one sequence of television programs associated with the identifiers for navigation wherein each of the at least one sequence comprises a corresponding navigational axis; and

navigating the at least one sequence of television programs, wherein the navigating comprises using a multi-axis navigation control to change from playing an on-demand program or a currently broadcast program in the at least one sequence to playing another on-demand program or another currently broadcast program in the at least one sequence.

2. (Original) The method as recited in claim 1, wherein the querying is performed by one or more predefined queries and each predefined query is associated with a combinable navigation context.

3. (Currently Amended) The method as recited in claim 1, wherein the set of attributes includes an actor attribute and a director attribute, and wherein logically combining the navigation contexts which correspond to the selected attributes comprises logically combining navigation contexts which correspond to the actor attribute and the director attribute to generate a single actor-director navigational axis.

4. (Original) The method as recited in claim 2, wherein links for launching the one or more predefined queries are associated with television program content.

5. (Original) The method as recited in claim 4, wherein the television program content is included in a conventional broadcast television show.

6. (Original) The method as recited in claim 4, wherein the television program content is included in one of an on-demand television show or an on-demand television movie.

7. (Original) The method as recited in claim 4, wherein the television program content is included in television musical programming.

8. (Original) The method as recited in claim 4, wherein a link is selectable while the television program content is playing.

9. (Original) The method as recited in claim 2, wherein links for launching the one or more predefined queries are associated with television program metadata.

10. (Original) The method as recited in claim 9, wherein a link is selectable while the television program metadata is displayed.

11. (Original) The method as recited in claim 2, wherein navigation controls perform the navigating.

12. (Original) The method as recited in claim 11, wherein the navigation controls select one or more of the combinable navigation contexts.

13. (Original) The method as recited in claim 12, further comprising using at least one of the combinable navigation contexts as a logical filter.

14. (Canceled) ~~The method as recited in claim 13, further comprising logically combining with Boolean operators.~~

15. (Currently Amended) The method as recited in ~~claim 14~~ claim 1, wherein the Boolean operators are applied automatically based on an association between a link for launching a predefined query corresponding to a navigation context and the television program content associated with the link.

16. (Currently Amended) The method as recited in ~~claim 14~~ claim 1, wherein the Boolean operators are applied automatically based on an association between a link for launching a predefined query corresponding to a navigation context and the television program metadata associated with the link.

17. (Canceled) ~~The method of claim 1, further comprising navigating the sequence, wherein the navigating comprises using a navigation control to change from playing a currently playing program in the sequence to playing another program in the sequence.~~

18. (Currently Amended) A method, comprising:

defining ~~a query~~ multiple queries for television programming metadata, wherein the multiple queries are logically combined using Boolean logic operators, wherein ~~when the query is launched, the query~~ each query uses one or more attribute values from a television program context from which the query was launched to produce a list of television program identifiers associated with the one or more attribute values, and wherein the one or more attribute values are selected by a viewer from among a set of attribute values which are each descriptive of a different aspects of a television program;

arranging the television programming metadata into a data structure wherein attribute values are associated with program identifiers; [[and]]

providing a user interface, wherein a navigation control selects whether to launch the query and if launched, designates one or more attribute values from the television program context;

when the query is launched, using the navigation control to access a television program associated with the list wherein the television program comprises a television program selected from a group consisting of on-demand television programs and currently broadcast television programs;
and

playing the television program in response to the navigation control
accessing the television program.

19. (Original) The method as recited in claim 18, wherein the television program context is a television program currently being displayed.

20. (Original) The method as recited in claim 18, wherein the television program context is program guide information associated with a television program.

21. (Original) The method as recited in claim 18, wherein the television program context is an order form for ordering an on-demand television program.

22. (Canceled) ~~The method as recited in claim 18, further comprising when the query is launched, using the navigation control to access television programs associated with television program identifiers on the list.~~

23. (Canceled) ~~The method as recited in claim 22, further comprising playing each television program in response to the navigation control accessing the television program.~~

24. (Currently Amended) The method as recited in claim ~~[[22]]~~18, further comprising displaying program information for each television in response to the navigation control accessing the television program.

25. (Currently Amended) The method as recited in claim ~~[[22]]~~18, further comprising:

pausing a first television program at a pause point in response to the navigation control accessing a second television program on the list; and

resuming the first television program at the pause point in response to the navigation control accessing the first television program.

26. (Canceled) ~~The method as recited in claim 18, further comprising defining multiple queries for television programming metadata, wherein multiple queries are capable of being logically combined.~~

27. (Currently Amended) The method as recited in ~~claim 26~~ claim 18, wherein the ~~multiple queries are logically combined through~~ Boolean logic operators are applied automatically based on an association between a link for launching a predefined query corresponding to a navigation context and the television program content associated with the link.

28. (Original) The method as recited in claim 27, wherein the Boolean operators are designated by the television program context.

29. (Currently Amended) A multi-axis television navigation system, comprising:

a server for storing and accessing digital television programming content;

a navigation control for navigating any one of multiple navigational axes to change[[ing]] from playing of a currently playing television program to playing of a television program provided by the server and for selecting links to launch predefined queries, wherein each predefined query queries a database based on television program attributes selected by a viewer and returns a navigation axis comprising a list of program identifiers of programs corresponding to a value for the television program attributes selected;

a means for storing television program metadata in a database,
a means for arranging the program metadata in a relational schema,
a means for defining and storing the pre-defined queries; ~~and~~
a means for embedding links to the pre-defined queries in logically associated metadata for a currently playing television program; and
a means for logically combining multiple predefined queries using Boolean operators.

30. (Canceled) ~~The multi-axis television navigation system as recited in claim 29, further comprising a means logically combining multiple predefined queries.~~

31. (Currently Amended) The multi-axis television navigation system as recited in claim 29[[30]], further comprising a means for selecting more than one link in order to logically combine multiple predefined queries.

32. (Original) The multi-axis television navigation system as recited in claim 29, wherein the relational schema adheres at least in part to a global listings format.

33. (Currently Amended) A television navigation engine, executing on a computing device, the engine comprising:

a database for television program metadata;

a query engine to find identifiers in the database corresponding to predefined queries, wherein a predefined query returns a navigational axis from the database, wherein a navigational axis is a list of identifiers of television programs;

a user interface to associate launch of one or more of the predefined queries with selection of ~~one or more~~ attributes descriptive of a currently playing television program or currently displayed metadata of the television program, and to receive the ~~one or more~~ attributes which are selected by a viewer;

a combiner to combine selected attributes using Boolean operators for launching multiple predefined queries;

an axis cache to store the list of identifiers returned by one or more predefined queries; and

a navigation controller associated with the user interface to select the attributes launching the predefined queries, to navigate a navigational axis that is a list of identifiers of television programs and to play television programs corresponding to the identifiers on the list wherein the television programs comprise television programs selected from a group consisting of on-demand programs and currently broadcast programs.

34. (Canceled) ~~The television navigation engine as recited in claim 33, further comprising a combiner to combine selected attributes for launching multiple predefined queries.~~

35. (Currently Amended) The television navigation engine as recited in ~~claim 34~~ claim 33, wherein the navigation controller is on a remote controller.

36. (Currently Amended) A multi-axis television program system that comprises a multi-axis database schema, the schema comprising:

instructions for arranging a database of television programming metadata into indices facilitating predefined queries;

wherein one or more links contextually associated with attributes of a television program call the predefined queries, wherein the attributes have been selected by a viewer from among a set of attributes and logically combined using Boolean operators, and wherein each attribute of the set corresponds to a combinable navigation context which can be used for generating a navigable sequence of television programs along a navigational axis,

wherein the predefined queries return a list of identifiers from the database corresponding with one or more of the attributes,

wherein each list forms a navigational axis,

wherein each identifier in a list~~the identifiers~~ corresponds to either an on-demand or currently broadcast television program[[s]],

wherein the television programs on the list are played ~~in turn~~ as accessed by a television channel navigation means for navigating one or more navigational axes.

37. (Original) The multi-axis database schema as recited in claim 36, wherein the one or more attributes include one of: type of program, program title, alphabetical order of title, year of release, channel, time, first air date, episode order, episode name, genre, actors, writer, director, producer, rating, sound characteristics, video characteristics, language, subtitles, closeness of match to search criteria, and popularity.

38. (Currently Amended) A multi-axis television program system that comprises [[O]]one or more computer readable media containing instructions that are executable by a computer to perform actions comprising:

defining television navigation axes according to attributes of television programs where two or more attributes are logically combined using Boolean operators to form a one of the navigational axes;

receiving a viewer selection of attributes from among a set of attributes, wherein each attribute selected is descriptive of a different aspect of a currently playing television program;

linking a predefined database query for one of the axes to a television program having the attributes that defines the axis;

providing a database of television program identifiers associated with the attributes;

providing a means for selecting and launching the predefined database query, wherein the query returns a list of program identifiers of television programs having the attribute that defines the axis; and

instructions to cycle through playing the television programs on the list when a user uses a navigation controller for changing television channels that, in turn, navigates along one of the navigational axes wherein the television programs comprise television programs selected from a group consisting of on-demand programs and currently broadcast programs.

39. (Canceled) ~~The one or more computer-readable media as recited in claim 38, further comprising instructions to cycle through playing the television programs on the list when a user uses a navigation controller for changing television channels.~~

40. (New) A method comprising:

- querying a database of television program metadata corresponding to television programs based on at least two television program attributes combined using at least one Boolean operator;
- receiving results from the querying wherein the results comprise television program identifiers and wherein each of the identifiers identifies a television program;
- generating a navigational axis for navigating the television programs that correspond to the television program identifiers wherein the navigational axis comprises an axis independent of a future time;
- playing one of the television programs, located on the navigational axis, on a television;
- receiving an instruction to change a channel on the television;
- responsive to receipt of the instruction, navigating the navigational axis to play a different television program located on the navigational axis;
- and
- playing the different television program on the television;

wherein the playing one of the television programs and the playing the different television program each play an on-demand program, a currently broadcast program or a combination of an on-demand program and a currently broadcast program.

41. (New) The method of claim 40 further comprising presenting on the television the navigational axis and at least some information for the television programs that correspond to the television program identifiers.

42. (New) The method of claim 40 further comprising an additional navigational axis, the additional navigational axis based on results from a different query.

43. (New) The method of claim 42 wherein a two-dimensional control feature allows for navigation along the navigational axis and the additional navigational axis.

44. (New) One or more computer-readable media comprising computer-executable instructions to perform the method of claim 40.